

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

NCS MULTISTAGE INC.,  
NCS MULTISTAGE, LLC,

Plaintiffs,

v.

NINE ENERGY SERVICE, INC.,

Defendant.

CIVIL ACTION NO. 6:20-CV-00277-ADA

**JURY TRIAL DEMANDED**

**DEFENDANT NINE ENERGY SERVICE, INC.’S  
SECOND RULE 50(A) MOTION FOR JUDGMENT AS A MATTER OF LAW**

Defendant Nine Energy Service, Inc. (“Nine”) hereby submits this motion for judgment as a matter of law under Federal Rule of Procedure 50(a).

**I. LEGAL STANDARD**

Judgment as a matter of law is appropriate if “the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for that party on that issue.” Fed. R. Civ. P. 50(a)(1). The motion should be granted “if the facts and inferences point so strongly and overwhelmingly in favor of one party that the Court believes that reasonable men could not arrive at a contrary verdict.” *Allen v. Seacoast Prods., Inc.*, 623 F.2d 355, 359 (5th Cir. 1980), overruled on other grounds by *Gautreaux v. Scurlock Marine, Inc.*, 107 F.3d 331, 332 (5th Cir. 1997). However, it is the function of the jury as the traditional finder of the facts, and not the Court, to weigh conflicting evidence and inferences, and determine the credibility of witnesses. *Allen*, 623 F.2d at 359.

**II. NINE ESTABLISHED THAT THE TCO TDP-PO PLUG IS PRIOR ART TO THE '445 PATENT AS A MATTER OF LAW.**

Nine established as a matter of law that the TCO TDP-PO Plug is prior art to U.S. Patent No. 10,465,445 (the “‘445 Patent”) because Nine established as a matter of law that (1) the TCO TDP-PO Plug was on sale in 2011, more than one year before the priority date of the ‘445 Patent, (2) the TCO TDP-PO Plug was on sale in 2012, before the priority date of the ‘445 Patent, and (3) the exception in 35 U.S.C. § 102(b)(1)(B) does not apply.

**1. Nine established as a matter of law that the TCO TDP-PO Plug was prior art because it was on sale in 2011, more than one year before the priority date of the '445 Patent.**

The TCO TDP-PO Plug is prior art because it was on sale years before the priority date of the ‘445 Patent. *See* 35 U.S.C. § 102(a). Mr. Brandsdal testified that he invented the TDP-PO Plug and had its first sale in 2011. He supported that testimony with reliable documentary evidence that the device was sold or offered for sale. Defendants Exhibit 9 shows the TCO website that offered the TDP-PO Plug for sale in July and September 2011. Defendant’s Exhibit 12 shows an invoice for the TDP-PO 572x375 13 cr, and Mr. Brandsdal testified that this sale was for the TCO TDP-PO Plug described in Defendants Exhibit 8. Mr. Brandsdal supported his testimony with reliable documentary evidence, and no reasonable jury could conclude that the TDP-PO Plug was not on sale in 2011, more than a year before the priority date of the ‘445 Patent. Thus, the TCO-TDP-PO Plug is prior art to the ‘445 Patent as a matter of law.

**2. Nine established as a matter of law that the TCO TDP-PO Plug was on sale in 2012, before the priority date of the '445 Patent.**

Nine established as a matter of law that the TCO TDP-PO Plug was on sale in August 2012. Mr. Brandsdal testified that TCO sold the TDP-PO Plug to Apache in August 2012 through TCO’s normal sales team. Nine corroborated that testimony with reliable documents, including

Defendant's Exhibit 14, a Purchase Order Agreement dated August 15, 2012, Defendant's Exhibit 15, a Certificate of Conformity, and Defendant's Exhibit 17, an End of Well report. These documents reflect both that the customer ordered the TCO TDP-PO Plug in August 2012 and did in fact use it, and NCS presented no evidence showing that this evidence was unreliable or tended to show that the sale did not occur.

Instead, NCS argued that the TCO TDP-PO is different from the TCO TDP-PoP. But Mr. Brandsdal testified that the plug was in early development and had multiple names. Rough TR 472:6-13. That is similar to Mr. Braden's testimony that NCS used different names during the early development of its Airlock tool such as "Igloo," but that was the same product. Rough TR 158:5-6; 160:3-8. A reasonable jury could not conclude that the TCO TDP-PO Plug was not on sale on or around August 2012, before the priority date of the '445 Patent.

**3. No reasonable jury could find that NCS "publicly disclosed" its Airlock device prior to the 2012 sale of the TDP-PO Plug.**

Further, Nine is entitled to judgment as a matter of law that NCS did not "publicly disclose" the "subject matter" of the '445 Patent prior to the 2012 sale of the TDP-PO Plug. Section 102(b)(1)(B), enacted with the America Invents Act, provides an exception to the prior art identified in Section 102(a)(1) under certain narrow circumstances.

However, NCS failed to present any evidence that this narrow exception applies here. Mr. Nipper testified that NCS shipped the Airlock device "sealed" such that customers "can't see inside." Rough TR 92:15-19. NCS's other evidence—engineering schematics from July 2012—are all marked confidential and there is no evidence that these schematics were ever shared with customers. Plaintiff's Exhibit 41; Plaintiff's Exhibit 42 Plaintiff's Exhibit 133; Plaintiff's Exhibit 128; Rough TR 158:11-13; 158:23-159:3; 159:15-16; 160:11-12. NCS showed that it went to lengths to keep the contents and mechanism of the BreakThru private.

The evidence establishes as a matter of law that NCS did not publicly disclose the Airlock device in July 2012. Section 102 distinguishes between such mere “disclosures” and “public disclosures.”

Put simply, “disclosure” means “prior art as traditionally defined.” . . . [T]he statute distinguishes between [such] “disclosures” and “public disclosures.” The exception in 102(b)(1)(B) says third party disclosures (stated passively, as “the subject matter disclosed” . . . ) are also not part of the prior art, if made within one year of filing – and *if preceded by a “public disclosure”* by the inventor. Disclosures, in other words, are specifically defined to be different from *public disclosures*.

Mark Lemley, Brief Amici Curiae of 45 Intellectual Property Professors in Support of Respondents at 4, *Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc.*, 139 S. Ct. 628 (2019) (emphases in original). Similarly, the Supreme Court has expressly rejected arguments that merely satisfying the on-sale bar in Section 102(a) requires publicity or that a prior sale indicates that the subject of the sale is a public disclosure. *Helsinn*, 139 S.Ct. at 634; *see also Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc.*, No. 2016-1284, 2018 WL 1583031, at \*4 (Fed. Cir. Jan. 16, 2018) (O’Malley, J., concurring) (“If all prior art events—i.e., all ‘disclosures’—recited in § 102(a) were already public disclosures, the word ‘publicly’ in § 102(b)(1)(B) would be redundant, and there would be no need for a separate rule for third-party disclosures.”). Instead under Section 102(b)(1)(B), the prior disclosure by the inventor must have been “publicly” disclosed, which at a minimum must mean that the disclosure was reasonably accessible to the public interested in it. *In re Klopfenstein*, 380 F.3d 1345, 1348 (Fed. Cir. Aug. 18, 2004). Further, the purchaser must not have been under any limitation, restriction, or obligation of secrecy to the inventor. *In re Smith*, 714 F.2d 1127, 1134 (Fed. Cir. 1983). NCS presented no evidence that its disclosure was reasonably accessible to the public interested in it, or that the purchaser was not under any obligation of secrecy.

Second, the statute only excludes as prior art a disclosure if the “subject matter” of that disclosure is **the same** as the inventor’s prior public disclosure. As explained by the USPTO, “[t]he exceptions of 35 U.S.C. 102(b)(1)(B) or 102(b)(2)(B) are only applicable when the subject matter of the intervening disclosure is **the same** as the subject matter of the earlier inventor-originated prior public disclosure.” MPEP § 717.01(b)(2)(I) (emphasis added). Thus, even if the Section 102(b)(1)(B) exclusion applies, it extends only to the “subject matter” previously disclosed by the inventor, and not to the entire reference. NCS has not established the subject-matter of its alleged public disclosure, or made any effort to compare that subject matter to the TCO TDP-PO Plug. Accordingly, Nine is entitled to judgment as a matter of law that the TDP-PO Plug is prior art to the ’445 Patent.

**III. NINE HAS ESTABLISHED THAT THE ASSERTED CLAIMS OF THE ’445 PATENT ARE INVALID AS A MATTER OF LAW.**

**A. The Gano Reference Anticipates Claims 28 and 29.**

Nine is entitled to judgment as a matter of law that claims 28 and 29 are anticipated by the Gano reference. A prior art reference anticipates a patent’s claim under 35 U.S.C. § 102(b) if the prior art “discloses each and every element of the claimed invention arranged or combined in the same way as the claim.” *Monsanto Tech. LLC v. E.I. DuPont de Nemours & Co.*, 878 F.3d 1336, 1342-43 (Fed. Cir. 2018).

It is undisputed that U.S. Patent Number 5,479,986 (Gano) is prior art to the ’445 Patent. Dr. Meehan testified that the Gano reference discloses each and every element of the claimed invention. The Patent Office also considered the Gano Patent as prior art and initially rejected the claims that became Claims 28 and 29 as unpatentable over Gano. In response to a rejection of the claims, NCS amended the claim to avoid the Gano limitation by the phrase “and is parallel to the internal diameter of the casing string.” NCS told the Patent Office that the claim is valid because

the Gano patent teaches a rupture disc in sealing engagement with and attached to a region of a tubular member “that is not parallel to the internal diameter of the casing string but is instead sloped.” Joint Exhibit 2. Dr. Meehan testified that the Gano reference does in fact disclose a rupture disc in sealing engagement with and attached to a region of a tubular member that is parallel to the internal diameter of the casing string. Rough TR. 629:23-630:14 Thus, because the Gano reference discloses each and every element of the claimed invention, a reasonable jury could not conclude that Claims 28 and 29 are not invalid, and Nine is entitled to judgment as a matter of law.

**B. The asserted claims are obvious in light of the prior art.**

Nine is entitled to judgment as a matter of law that Claims 28-29, 36, 39, 50-52, and 55-57 are obvious in light of the prior art. A claim is obvious if “some motivation or suggestion to combine the prior art teachings” can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). “One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims.” *KSR Int'l Co.*, 550 U.S. at 419–20. Obviousness “is a question of law based on underlying findings of fact.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1372 (Fed. Cir. 2019). The '445 Patent is invalid because it is obvious as a matter of law.

There are four prior art references at issue in this case:

- U.S. Patent Number 5,479,986, “Gano”;
- U.S. Patent Number 5,829,526, “Rogers Patent”;
- Article entitled “Buoyancy Assist Extends Casing Reach in Horizontal Wells” by H.E. Rogers, D.L. Bolado, and B.L. Sullaway, “Rogers Publication”; and
- the TCO TDP-PO Plug.

There is no dispute that the first three references are prior art. And as discussed above, Nine also established the TCO TDP-PO Plug is prior art as a matter of law.

Dr. Meehan testified that the Gano reference, in combination with either the Rogers Publication or the Rogers Patent, renders obvious Claims 28-29, 36, 39, 50-52 and 55-57. Rough TR 653:5-15.

Dr. Meehan testified that the TDP-PO Plug, in combinations with either the Rogers Patent or the Rogers Publication renders obvious Claims 28-29, 36, 39, 50-52, 55-57. Rough TR 653:16-23.

Dr. Meehan's testified that it would be obvious to one skilled in the art to combine the Gano patent with the Rogers Publication or the Rogers Patent. Rough TR 651:1-5. Indeed, the Rogers publication itself teaches that it would be beneficially to have a plug that fully opens. Rough TR 648:13-17. And Dr. Meehan testified that it would be better if the tool fully opens and "even better if you don't have to drill it" out. Rough TR 603:1-3; 648:17-22. And Dr. Meehan testified that a person of ordinary skill in the art would be motivated to combine the casing flotation techniques of the Rogers Patent or publication with the TDP-PO Plug because it would allow "higher pressure limitations, better control on how the device actuates, the fact that the plug is destroyed into tiny pieces that don't interfere with anything." Rough TR 650:16-18.

The patent examiner also agreed that it would be obvious to combine Gano and the Rogers Patent. DX217. Dr. Meehan testified that the patent examiner at the PTO did not consider the TCO TDP-PO Plug, and in his opinion, had the examiner considered that reference he would have rejected the claims. Rough TR 651:14-17.

Accordingly, Nine is entitled to judgment as a matter of law that Claims 28-29, 36, 39, 50-52, 55-57 are invalid.

**IV. NINE HAS ESTABLISHED THAT IT HAS NOT INFRINGED THE '445 PATENT AS A MATTER OF LAW.**

Dr. Meehan testified that all asserted claims require that the rupture disc is “directly secured” to the cylindrical surface, and according to Dr. Meehan that limitation is not met because the rupture disc “does not even touch the cylindrical surface.” Rough TR 582:4-58. Because the accused products do not contain a rupture disc that is “directly secured,” no reasonable jury could return a verdict in favor of NCS on that issue. Dr. Meehan also testified that the rupture disc is not in sealing engagement with the cylindrical surface. Rough TR 583:18-23. Because the accused BreakThru device does not have these limitations, Nine does not infringe as a matter of law.

**V. NCS FAILED TO PROVE INFRINGEMENT OF CLAIMS 39, 51, AND 52**

NCS failed to present legally sufficient evidence of infringement of claims 39, 51, and 52. Dr. Rodgers compared the densities of the materials inside the sealed chamber and outside the sealed chamber. But Dr. Meehan testified that specific gravity is not the same as density, and that the specific gravity of a gas cannot be compared with the specific gravity of a liquid. Rough TR 596:7-16.

**VI. NCS HAS NOT SHOWN THAT NINE INDIRECTLY INFRINGED THE '445 PATENT BECAUSE NINE DID NOT INTEND TO INFRINGE.**

A reasonable jury could not return a verdict for NCS on indirect infringement. During Nine’s case in chief, Nine presented evidence that it relied on a reasonable reading of the asserted claims and believed that the BreakThru did not practice the limitations of the patent. To prove induced infringement, NCS was required to prove that: “(1) a third party directly infringed the asserted claims,” (2) Nine “induced those infringing acts,” and (3) Nine “knew the acts it induced constituted infringement.” *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 843 F.3d 1315, 1332 (Fed. Cir. 2016). Specific intent to infringe is not established “if the defendant

reads the patent's claims differently from the plaintiff, and that reading is reasonable.” *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 642, 135 S. Ct. 1920, 1928, 191 L. Ed. 2d 883 (2015).

Clair Holley testified that Nine does not “have any intent that its customers infringe the ’445 Patent.” Rough TR 440:6-8. Plaintiff’s Exhibit 262, a letter from Nine’s counsel to NCS’s counsel from January 28, 2020, just a month after the patent issued, presents claim construction that is reasonable. Pages 2-3 of the exhibit present Nine’s reading of the claims and its belief that it does not infringe the claims. This Court should enter judgment as a matter of law because Nine relied on a reasonable reading of the claims and believed that its product did not infringe. Even though this Court construed the claims differently, Nine’s reliance on its reasonable reading of the claims shows Nine lacked specific intent to infringe as a matter of law.

## **VII. CONCLUSION**

NCS has failed to present evidence from which a reasonable jury could conclude Nine or its customers infringe the ’445 patent. Nine respectfully requests that the Court enter judgment as a matter of law that (1) the TCO TDP-PO Plug was on sale in 2011, more than one year before the priority date of the ’445 Patent, (2) the TCO TDP-PO Plug was on sale in 2012, before the priority date of the ’445 Patent, (3) NCS failed to present evidence that it publicly disclosed the same subject matter as the TCO TDP-PO Plug prior to the 2012 sale of the TCO TDP-PO Plug, (4) the Gano reference anticipates claims 28 and 29 of the ’445 Patent, (5) claims 28-29, 36, 39, 50-52, and 55-57 of the ’445 Patent are rendered obvious by prior art, (6) Nine does not directly infringe the ’445 Patent, and (7) Nine lacked the specific intent to induce infringement.

Dated: January 20, 2022

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on the 20th day of January 2022, a true and correct copy of the foregoing document was served on all counsel of record via the Court's CM/ECF system.

/s/ Hilary L. Preston

Hilary L. Preston